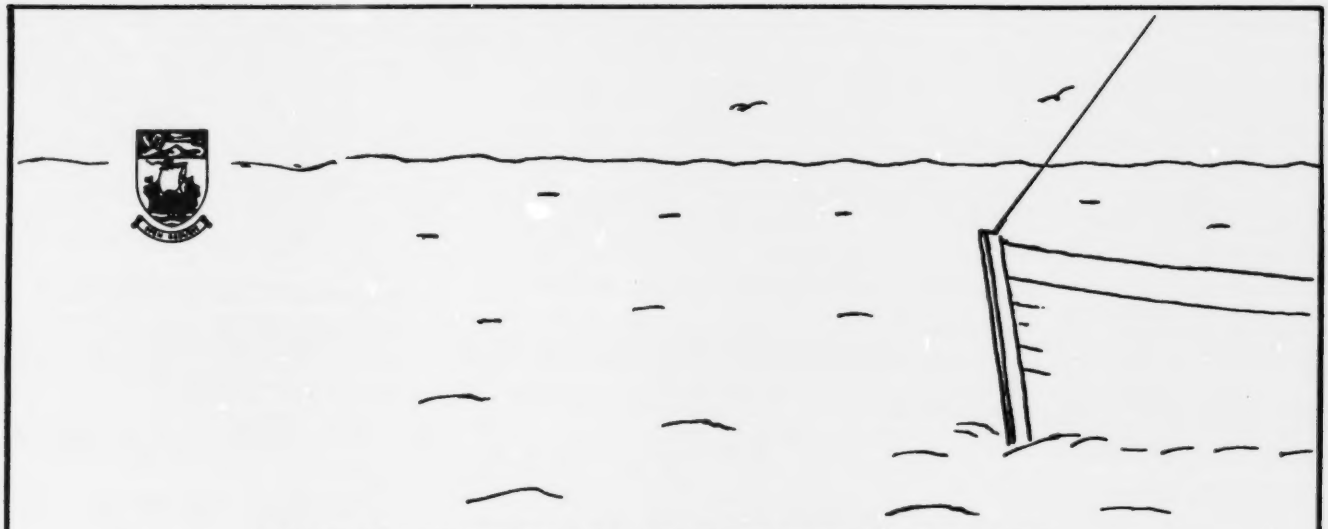
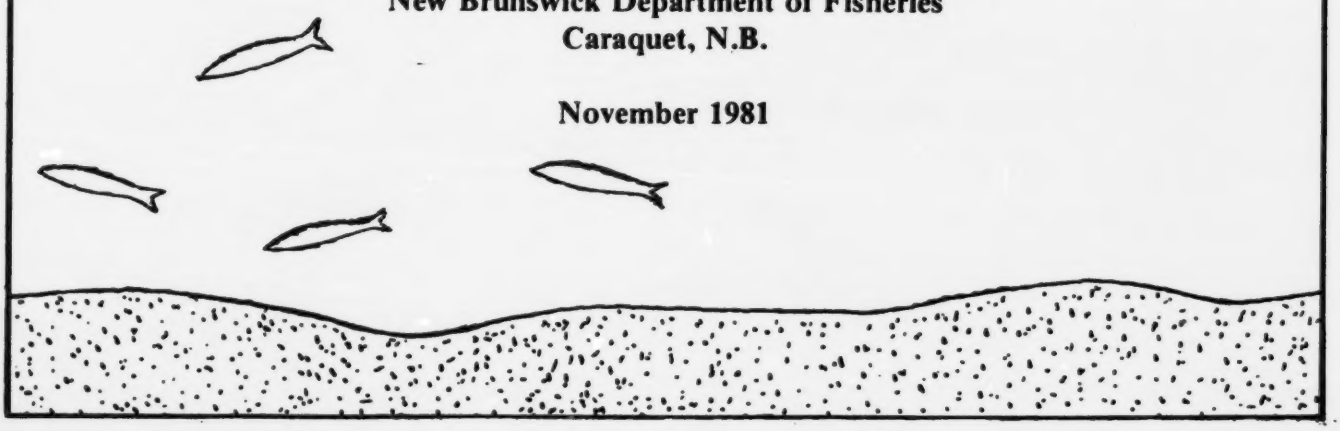


OPERATIONS OF SELECTED BOATS NEW BRUNSWICK NORTH AND SOUTHEAST SHORES

1980

Eudore Dugas
New Brunswick Department of Fisheries
Caraquet, N.B.

November 1981



FOREWARD

Each year, the New Brunswick Department of Fisheries conducts studies on the economic viability of various sectors of the fishing fleet in order to provide certain guidelines for departmental or other decisions. This year, the Ressource Policy and Planning Division, under the direction of Mr. Henri Legaré, was responsible for the program, while during previous years, the study was conducted by the Planning and Co-ordination Branch.

This study of the 1980 season includes forty-seven (47) fishing boats selected from various regions on the North (Region 1) and Southeast (Region 11) shores of the provinces, boats which used different types of fishing gear. We have already established a program to extend our research activities to the Bay of Fundy (Region 111) in 1981. The boats under study were selected so as to represent the real situation of the fishing fleet as accurately as possible.

It should be noted that these boats all belong to captains who are either sole owners or co-owners with majority control in a limited company. In other words, they are responsible for the fishing activities and for the degree of success of the enterprise.

We were able to accomplish this work through the excellent co-operation of the captains and of all those interviewed. Representatives of businesses and of the provincial and federal Departments of Fisheries supported this project. We should mention, in particular, Mr. Peter Hart of the federal Department of Fisheries and Oceans who provided special assistance for the project, Mr. Michel Albert who compiled most of the data, and Miss Mariette Robichaud who typed the report.

To all these people, and to all those who co-operated either directly or indirectly, I would like to express my sincere thanks.

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1. INTRODUCTION

The proposed program for 1980 included eighty-one (81) fishing boats. However, because we had no one to do this work in the Bay of Fundy region, and because certain groups of boats had to be eliminated, only forty-seven (47) boats are included in the 1980 study. Thus, the group of new steel-hulled boats constructed on the Camarin 11* model did not fish long enough to obtain valid results. Similarly, the inshore boats in the Pointe Sapin and Buctouche regions were not included in the study because of the short time available. On the other hand two new groups were added to the program, that is, the Lamèque-Shippegan inshore herring boat (group no. 4) and the Cap-Pelé inshore boats (group no. 8).

The inshore boats (boats less than 50 feet in length) are grouped by fishing regions and are identified by a number and the name(s) of the region involved. For the purpose of this study, these boats are considered as lobster boats, with the exception of group no. 2 for the Caraquet region and group no. 4 for the Lamèque-Shippegan region which represent herring boats, that is, boats whose principal activity is to fish herring.

* Midshore boat with a length overall of 65 feet.

The midshore boats are grouped mainly according to the type of fishing gear used: crab pots, Scottish seines, shrimp and groundfish trawls. They are all from the north shore (Region 1) of the province.

2. DESCRIPTION

Table 1 indicates the characteristics and the number of boats included in each group's sample.

Each group studied is represented by three to five boats. The average age of the inshore boats is seven (7) years. Of the midshore boats, the shrimp boats have the highest average age, that is, 16 years.

Table I - Description of boats studied

New Brunswick North and Southeast shores

Regions and types of boats (Group 1-12)	Boats included in the sample	Hull	Averages per boat		
			Age	(1) L.O.A.	Gross tonnage
	(number)		(years)	(feet)	
Inshore boats					
1. Stonehaven-Maisonnette	5	wood	7	33	7
2. Caraquet	4	wood	9	49	18
3. Lamèque-Shippegan	4	wood	3	35	9
4. Lamèque-Shippegan	3	wood	11	44	14
5. Val Comeau-Neguac	4	wood	8	43	12
6. Baie-Ste-Anne	4	wood	7	41	11
7. Richibucto	4	wood	7	44	13
8. Cap-Pelé	3	wood	9	41	11
9. Cape Tormentine	4	wood	6	44	13
Midshore boats					
10. Crab boats	4	wood	8	65	58
11. Scottish seiners	4	wood	8	64	58
12. Shrimp boats	4	wood	16	85	126

(1) L.O.A.: length overall

According to Table 2, all the boats, with the exception of two inshore boats, are equipped with radio-telephone service, which includes General Radio Service (Citizens Band or C.B.). In all, the boats have the following devices:

58 sounders

74 radio-telephones

22 lorans

28 radars

10 Decca navigators

In many cases, the loran C replaces the Decca navigator which will eventually be discontinued. Several midshore boats are also equipped with automatic pilots.

Table 2 - Electronic equipment used

Regions and types of boats (Group 1-12)	Boats includes in the sample	Equipment used				
		Sounder	Radio-telephone	Loran	Radar	Decca Navigator
	number	number	number	number	number	number
Inshore boats						
1. Stonehaven-Maisonnette	5	3	3			
2. Caraquet	4	5	7		3	
3. Lamèque-Shippegan	4	4	4			
4. Lamèque-Shippegan	3	2	3			
5. Val Comeau-Neguac	4	3	4			
6. Baie-Ste-Anne	4	4	5			
7. Richibucto	4	4	4			
8. Cap-Pelé	3	2	3	1		
9. Cape Tormentine	4	5	4		2	
Midshore boats						
10. Crab boats	4	9	9	8	8	3
11. Scottish seiners	4	8	12	6	8	4
12. Shrimp boats	4	9	16	7	7	3
Total	47	58	74	22	28	10

3. OPERATIONAL PERFORMANCE

The thirty-five (35) inshore boats included in the study for 1980 landed a total of 2 223 667 pounds of fish, which included fourteen (14) different species (Table 3 (a)). Lobster accounted for 9,4% of the total landings and 51,4% of the total landed value, while herring represented 37,5% of the landings and 18,9% of the total landed value. The other species were of lesser importance. The average price received for all species was 27,50¢ per pound.

Twelve (12) midshore boats were included in the study, that is, crab boats, Scottish seiners and shrimp boats. These boats landed a total of 10 323 561 pounds of fish during the 1980 season for a corresponding value of 2 127 224,08$ (Table 3 (b)). Cod represented 44,0% of the total landings and 29,4% of the total landed value. Crab and shrimp represented 29,7% and 25,7% of the total landed value respectively. The average price received for all species was 20,61¢ per pound.

A detailed analysis for each group of boats appears in the Appendix of this report (Tables 2 to 6) and includes the landed volume and value, the price received per species, and the percentage distribution of volume and landed value.

The results of the fishing-boats activities as they relate to landed values are given in Table 4.

Table 3 (a) - Total landings, total landed value and average prices per species for inshore boats (lobster and herring) - 1980

Species	Total landings	Percentage of total	Total landed value	Percentage of total	Average prices received
	lbs	%	$	%	¢
Lobster	209 532	9,4	314 321,31	51,4	150,01
Herring	833 826	37,5	115 771,03	18,9	13,88
Mackerel	633 762	28,5	65 987,53	10,8	10,41
Cod	67 411	3,0	11 964,76	1,9	17,75
Plaice	79 204	3,6	9 946,83	1,6	12,56
Hake	141 179	6,4	20 261,70	3,3	14,35
Alewife	187 736	8,5	12 000,92	2,0	6,39
Shad	416	Ø	57,70	Ø	13,87
Salmon	6 621	0,3	15 868,11	2,6	239,66
Tuna	2 831	0,1	3 538,70	0,6	125,00
Caplin	45 967	2,1	890,74	0,1	1,94
Oyster	743	Ø	466,00	0,1	62,72
Scallop	11 950	0,5	40 194,10	6,6	336,35
Cancer crab	2 489	0,1	321,65	0,1	12,92
Totals	2 223 667	100,0	661 591,08	100,0	27,50

Ø less than one half of 0,1

Table 3 (b) - Total landings, total landed value and average prices per species for midshore boats - 1980

Species	Total landings	Percentage of total	Total landed value	Percentage of total	Average prices received
	lbs	%	$	%	¢
Snow crab	2 326 430	22,5	631 284,16	29,7	27,14
Cod	4 544 870	44,0	625 964,24	29,4	13,77
Hake	58 197	0,6	5 773,46	0,3	9,92
Plaice	1 573 754	15,3	241 824,82	11,4	15,37
Haddock	13 324	0,1	2 932,96	0,2	22,01
Cusk	1 288	Ø	141,68	Ø	11,00
Halibut	2 081	Ø	2 974,80	0,1	142,95
Turbot	67 424	0,7	6 780,96	0,3	10,06
Catfish	816	Ø	85,52	Ø	10,48
Redfish	478 305	4,6	62 223,00	2,9	13,01
Shrimp	1 250 534	12,1	547 137,34	25,7	43,75
*Unclassified	6 538	0,1	101,14	Ø	1,55
Totals	10 323 561	100,0	2 127 224,08	100,0	20,61

Ø less than one half of 0,1

* Unclassified means all species classified by buyers as being of inferior quality and to be used for fish meal production.

Table 4 - Average operational performance of fishing boats - 1980

Regions and types of boats (Group 1-12)	Averages by region and type of boat							
	L.O.A. (1)	Crew members	Trips	Days		Hours fished	Landings	Landed value
				at sea	fished			
	feet	number	number	number	number	number	lbs	$
Inshore boats								
1. Stonehaven-Maisonnette	33	1,8	95	95	95	(2) 781	55 198	15 459
2. Caraquet	49	3,3	60	74	60	(2) 583	133 905	16 300
3. Lamèque-Shippegan	35	2,1	82	82	82	(2) 628	36 819	16 107
4. Lamèque-Shippegan	44	2,2	51	58	51	(2) 305	46 533	8 174
5. Val Comeau-Neguac	43	2,1	81	81	81	(2) 624	22 673	16 386
6. Baie-Ste-Anne	41	2,3	102	102	102	(2) 520	71 643	21 587
7. Richibucto	44	2,4	90	90	90	(2) 722	90 852	24 958
8. Cap-Pelé	41	2,0	91	91	91	(2) 720	81 741	20 598
9. Cape Tormentine	44	2,0	76	76	76	(2) 851	34 822	16 657
Midshore boats								
10. Crab boats	65	4,2	41	116	76	(3) 825	659 780	167 594
11. Scottish seiners	64	4,7	29	112	77	1 056	1 245 463	178 618
12. Shrimp boats	85	4,2	16	156	112	1 794	675 648	185 594

(1) L.O.A.: length overall

(2) Figures are calculated on fishermen's estimates and include all types of fishing.

(3) Number of hours to haul up, bait, and set traps, as well as the number of hours of groundfish trawling, if any.

The data in Table 5 compare the operational efficiency for the various groups of boats. The Scottish seiners gave the best performance in regard to volume per man per fishing season, that is, 262 756 pounds; as well as for each trip to sea and for each day at sea, that is, 42 947 pounds and 11 120 pounds. On the other hand, shrimp boats gave the best performance in regard to the landed value per man and per trip to sea, that is, 43 772$ and 11 421$ respectively.

Table 6 on page 13 provides information similar to that in the preceding table, but in greater detail, by giving a comparative statement of the average rate of output per hour fished and per man-day at sea per boat. Thus, the average rate of output by volume per hour fished varies from 41 to 1 180 pounds, while the average rate of output value varies from 20$ to 203$ per hour fished.

Table 5 - Operational efficiency of fishing boats - 1980

Regions and types of boats (Group 1-12)	Averages by region and type of boat						
	L.O.A.	Landing per			Landed value per		
		man (1)	trip (2)	day at sea	man (1)	trip (2)	day at sea
	feet	lbs	lbs	lbs	$	$	$
Inshore boats							
1. Stonehaven-Maisonnette	33	30 329	579	579	8 494	162	162
2. Caraquet	49	40 825	2 251	1 803	4 970	274	220
3. Lamèque-Shippegan	35	17 205	448	448	7 527	196	196
4. Lamèque-Shippegan	44	21 151	912	802	3 716	160	141
5. Val Comeau-Neguac	43	11 060	281	281	7 993	203	203
6. Baie-Ste-Anne	41	31 841	702	702	9 594	212	212
7. Richibucto	44	37 234	1 009	1 009	10 229	277	277
8. Cap-Pelé	41	40 871	895	895	10 299	226	226
9. Cape Tormentine	44	17 676	460	460	8 455	220	220
Midshore boats							
10. Crab boats	65	155 608	16 291	5 712	39 527	4 138	1 451
11. Scottish seiners	64	262 756	42 947	11 120	37 683	6 159	1 595
12. Shrimp boats	85	159 351	41 578	4 338	43 772	11 421	1 192

(1) Man per fishing season

(2) Per boat

Table 6 - Average rate of output - 1980

Regions and types of boats (Group 1-12)	Crew members	Averages			
		Output per hour fished		Output per man day at sea	
		Landings	Value	Landings	Value
Inshore boats					
1. Stonehaven-Maisonnette	1,8	71	20	317	89
2. Caraquet	3,3	230	28	549	67
3. Lamèque-Shippegan	2,1	59	26	209	92
4. Lamèque-Shippegan	2,2	152	27	393	69
5. Val Comeau-Neguac	2,1	36	26	137	99
6. Baie-Ste-Anne	2,3	138	41	313	94
7. Richibucto	2,4	126	35	414	114
8. Cap-Pelé	2,0	113	29	447	113
9. Cape Tormentine	2,0	41	20	234	112
Midshore boats					
10. Crab boats (1)	4,2	800	203	1 348	342
11. Scottish seiners	4,7	1 180	169	2 351	337
12. Shrimp boats	4,2	377	103	1 021	281

(1) Includes crab and groundfish fishing.

Most of the inshore boats do various types of fishing during the season, that is, lobster, herring, or other fishing. Different types of fishing may be carried out simultaneously, although most of the time, one type of fishing follows another.

In order to meet a special request, we have determined for the second consecutive year, the fishing effort for each type of fishing by indicating the hours of fishing calculated on the basis of the fishermen's estimates for each. These data are found in Table 7 which indicates that the lobster-fishing hours represent an average of 46% of the total hours fished, that is, a general average of 301 hours out of a total of 648 hours.

The average rate of output for the main types of fishing appears in Table 8. It should be noted that cod can be fished either with a net, handline, or trawl net, although we do not take these various methods into consideration. The Baie-Ste-Anne region has the highest rate of output for lobster fishing, that is, 30 pounds, which corresponds to 47$ per hour fished.

Table 7 - Hours fished for main types of fishing - inshore boats - 1980

Boats by region (Groups 1-9)	Average hours fished									
	Lobster (2)	Herring (3)	Mackerel (4)	Cod (5)	Alewife	Scallop	Oyster	Tuna	Caplin	Total (1)
1. Stonehaven-Maisonnette	359	350	56	16						781
2. Caraquet		322	165	6				30	60	583
3. Lamèque-Shippegan	416	23	57	132						628
4. Lamèque-Shippegan	93	59	113	40						305
5. Val Comeau-Neguac	442	5	112	52			13			624
6. Baie-Ste-Anne	303	80	28	109						520
7. Richibucto	346	82		76	43	175				722
8. Cap-Pelé	373	163	184							720
9. Cape Tormentine	330	18		214		289				851
General average (6)	301	130	75	73	5	53	1	3	7	648

(1) Figures calculated on fishermen's estimates for all main types of fishing.
(2) Accidental catches of cancer crab.
(3) Accidental catches of mackerel, alewife, salmon, and cod.
(4) Accidental catches of herring, alewife, salmon, shad, and cod.
(5) Accidental catches of plaice, hake salmon, and shad.
(6) General average applied to the 35 inshore boats included in this study.

Table 8 - Average rate of output for main types of fishing - inshore boats - 1980

Boats by region (Groups 1-9)	Average landings and landed values per hour fished (1)																	
	Lobster		Herring		Mackerel		Cod		Alewife		Scallop		Oyster		Tuna		Caplin	
	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$
1 Stonehaven-Maisonnette	19	26	72	10	386	39	102	16										
2 Caraquet			200	29	338	34	250	45							24	29	192	4
3 Lamèque-Shippegan	19	29	427	63	105	13	98	15										
4 Lamèque-Shippegan	21	31	345	45	202	21	35	5										
5 Val Comeau-Neguac	19	27	125	18	95	35	58	9					14	9				
6 Baie-Ste-Anne	30	47	386	40	745	100	99	14										
7 Richibucto	22	30	324	56			172	33	983	64	9	27						
8 Cap-Pelé	21	30	232	31	196	23												
9 Cape Tormentine	13	24	90	9			128	15			5	18						

(1) Accidental catches included in quantities and values where applicable

The relationship between total investment and output value is another measure of efficiency which may be important for those testing new types of fishing vessels, and even for governments which finance and grant subsidies for fishing boats. For the boat owner, the relationship between the net investment and output value is of the utmost importance.

According to Table 9, the most favorable relationship was provided by the inshore boats of Richibucto. For each 100$ that the owner invested in his entreprise, he received average total receipts of 122,90$.

Table 10, on page 19, gives the relationship between the investment and output value per man. For each 100$ of net investment, the group of Richibucto boats produced a value of 121,80$ of fish per man.

Table 9 - Relationship between investment and output value of boats - 1980

Regions and types of boats (Group 1-12)	L.O.A.	Average investment per boat		Average total receipts per boat (3)	Relationship between average total receipts and	
		Total (1)	Net(2)		average total investment	average net investment
	feet	$	$	$	%	%
Inshore boats						
1. Stonehaven-Maisonnette	33	20 638	19 874	15 459	74,9	77,8
2. Caraquet	49	41 051	38 762	17 810	43,4	45,9
3. Lamèque-Shippegan	35	21 032	18 862	16 109	76,6	85,4
4. Lamèque-Shippegan	44	19 060	18 241	8 174	42,9	44,8
5. Val Comeau-Neguac	43	17 191	14 359	16 404	95,4	114,2
6. Baie-Ste-Anne	41	31 530	28 277	21 883	69,4	77,4
7. Richibucto	44	23 993	20 498	25 189	105,0	122,9
8. Cap-Pelé	41	24 062	23 062	20 598	85,6	89,3
9. Cape Tormentine	44	22 332	18 201	16 657	74,6	91,5
Midshore boats						
10. Crab boats	65	305 669	222 348	167 631	54,8	75,4
11. Scottish seiners	64	269 701	183 615	178 624	66,2	97,3
12. Shrimp boats	85	288 800	259 264	185 790	64,3	71,7

1) Total investment includes the initial or transfer cost of the boat, the cost of gear, all subsequent major improvements, and the value of rented equipment.

2) Net investment does not include the subsidy granted during construction or the value of the rented equipment.

3) Total receipts include the sale of fish and other receipts such as rebates or others.

Table 10 - Relationship between investment and output value of boats per man - 1980

Regions and types of boats (Group 1-12)	Averages per man			Relationship between landed value and investment per man	
	Total investment	Net investment	Landed value	Total	Net
	$	$	$	%	%
Inshore boats					
1. Stonehaven-Maisonnette	11 466	11 041	8 588	74,9	77,8
2. Caraquet	12 440	11 746	4 940	39,7	42,1
3. Lamèque-Shippegan	10 015	8 982	7 670	76,6	85,4
4. Lamèque-Shippegan	8 664	8 291	3 716	42,9	44,8
5. Val Comeau-Nèguac	8 186	6 838	7 803	95,3	114,1
6. Baie-Ste-Anne	13 709	12 294	9 386	68,5	76,3
7. Richibucto	9 997	8 541	10 399	104,0	121,8
8. Cap-Pelé	12 031	11 531	10 299	85,6	89,3
9. Cape Tormentine	11 166	9,101	8 329	74,6	91,5
Midshore boats					
10. Crab boats	72 778	52 940	39 903	54,8	75,4
11. Scottish seiners	57 383	39 067	38 004	66,2	97,3
12. Shrimp boats	68 762	61 730	44 189	64,3	71,6

(1) Includes the sale of fish and not "other receipts".

4. RETURNS TO LABOUR AND CAPITAL

a) Returns to labour

Inshore boat owners hire helpers who are paid weekly wages, particularly when lobster fishing is involved. Sometimes, crew members are hired who are paid according to a sharing system, such as 20% of the value of the catch or 5$ per barrel (herring fishing).

As to the inshore-boat owners themselves, they have no definite method of determining their wages; instead, they prefer to deduct, as needed, amounts from the net boat share. As we know that the owners need some wages from their enterprises, it is preferable and more equitable to use a certain method of calculating an average wage rather than to simply take nothing into consideration and to make no deductions.

Although there is no perfect method of calculation, it seems that a weekly wage multiplied by a certain number of weeks would provide a reasonable estimate for an average wage.

Table 11 indicates the average net return per man according to the duty he performed during the fishing season. The average wage for the captain (or owner) of an inshore boat is calculated

at a rate of 250$ per week multiplied by the average number of weeks in the fishing season for each of the groups concerned. (See Table 1 in the Appendix for the number of weeks in the fishing season). Three weeks in the spring for repairs are added to the number of weeks in the fishing season for all groups concerned. Thus, the average salary of the captain in the Stonehaven-Maisonnette group would be 250$ x (20 + 3) = 5 750$.

The average salary of the first helper for the thirty-five (35) inshore boats is 3 429$ and varies from a minimum of 300$ to a maximum of 8 363$ for the fishing season. According to Table 11, the highest average salary for the first helper is in the Cap-Pelé group, that is, 6 353$ for the fishing season.

The amounts paid to helpers on the thirty-five (35) inshore boats for the season are as follows:

First helper	120 031$
Second helper	22 298$
Third helper	4 795$
Total	147 124$

Crew members on crab boats receive a share wage based on the value of the catches. The share system is 40% as boat share and 60% as crew share. Crew expenses include fuel, ice, food, and bait. In general, no commission is paid in addition to share wages.

Scottish seiners have a similar share system, that is, 40% as boat share and 60% as crew share. Unloading rather than bait is often a crew expense. According to Table 11, a crew member may receive an average salary of 17 846$ for the fishing season.

The share system is different on shrimp boats. The boat share is 63% and the crew share is 37%. Crew expenses usually include only food and unloading. In addition to the share wage, there are commissions for certain duties such as captain, engineer, and even for cook and icer. These commissions are based either on a percentage of the value of the catch or on a given rate for each day at sea. The captain could earn 21 368$ for the fishing season (Table 11).

Table 12, on page 24, shows the average net income per man-day at sea.

Table 11 - Average net returns per man per fishing season - 1980

Regions and types of boats (Groups 1-12)	Days at sea	Crew categories					
		Captain	Chief engineer	Cook	Icer	Deckhand	1st helper
		$	$	$	$	$	$
Inshore boats							
1 Stonehaven-Maisonnette	95	5 750					2 459
2 Caraquet	74	4 250					2 749
3 Lamèque-Shippegan	82	5 000					3 810
4 Lamèque-Shippegan	58	5 750					1 798
5 Val Comeau-Neguac	81	4 500					2 481
6 Baie-Ste-Anne	102	5 000					3 851
7 Richibucto	90	6 000					6 003
8 Cap-Pelé	91	6 000					6 353
9 Cape Tormentine	76	6 250					1 927
Midshore boats							
10 Crab boats	116	20 847				17 731	
11 Scottish seiners	112	17 846				17 846	
12 Shrimp boats	156	21 368	15 093	14 592	14 252	14 035	

(1) Certain inshore boats were able to fish for part of the season without a helper.

Table 12 - Average net returns per man per day at sea - 1980

Regions and types of boats (Groups 1-12)	Crew categories					
	Captain	Chief engineer	Cook	Icer	Deckhand	1st helper
	$	$	$	$	$	$
Inshore boats						
1 Stonehaven-Maisonnette	60,53					25,88
2 Caraquet	57,43					37,15
3 Lamèque-Shippegan	60,98					46,46
4 Lamèque-Shippegan	99,14					31,00
5 Val Comeau-Neguac	55,56					30,63
6 Baie-Ste-Anne	49,02					37,75
7 Richibucto	66,67					66,70
8 Cap-Pelé	65,93					69,81
9 Cape Tormentine	82,24					25,36
Midshore boats						
10 Crab boats	179,72				152,85	
11 Scottish seiners	159,34				159,34	
12 Shrimp boats	136,97	96,75	93,54	91,36	89,97	

b) Returns to capital

The average total of capital investment for each group studied is divided, according to Table 13, as follows:

- Original cost or cost of acquiring boat.
- Purchases of electronic or other equipment, and all subsequent major improvements to boat.
- Cost of fishing gear.
- Value of rented equipment, such as the Decca navigator.

It is obvious from this table that, because shrimp boats have the highest average age of all the groups of boats, the cost of equipment purchases or major improvements is greater (67 364$).

The method of financing the invested capital is indicated in Table 14. The financing provided by the New Brunswick Fisheries Development Board becomes increasingly important as the cost of the investment increases.

Table 13 - Average total cost of capital investment - 1980

Regions and types of boats (Groups 1-12)	Average cost of capital investment divided as follows:				
	Original cost or cost of acquisition	Purchases or improvements	Cost of fishing gear	Value of rented equipment	Total cost of capital investment at the end of 1980
	$	$	$	$	$
Inshore boats					
1 Stonehaven-Maisonnette	8 143	1 485	11 010		20 638
2 Caraquet	17 701	11 195	12 155		41 051
3 Lamèque-Shippegan	10 698	441	9 893		21 032
4 Lamèque-Shippegan	8 330	2 242	8 488		19 060
5 Val Comeau-Neguac	8 231	881	8 079		17 191
6 Baie-Ste-Anne	10 818	1 505	19 207		31 530
7 Richibucto	10 735	1 771	11 487		23 993
8 Cap-Pelé	9 333	1 679	13 050		24 062
9 Cape Tormentine	11 554	3 099	7 679		22 332
Midshore boats					
10 Crab boats	237 844	22 800	38 775	6 250	305 669
11 Scottish seiners	227 988	17 109	16 354	8 250	269 701
12 Shrimp boats	194 391	67 364	21 045	6 000	288 800

(1) Cost of fishing gear not included.

Table 14 - Method of financing capital investment - 1980

Regions and types of boats (Groups 1-12)	Average cost of investment financed by:							
	Fisherman		N.B. Fisheries Development Board		Federal subsidy (1)	Rented equipment	Additional loans (other financial institutions	Total cost of investment
	cash payment	additional payment	original loan	additional loan				
	$	$	$	$	$	$	$	$
Inshore boats								
1 Stonehaven-Maisonnette	7 479	12 395			764			20 638
2 Caraquet	7 055	16 434	7 589	3 934	2 289		3 750	41 051
3 Lamèque-Shippegan	1 270	11 346	6 246		2 170			21 032
4 Lamèque-Shippegan	3 993	10 086	3 429	733	819			19 060
5 Val Comeau-Neguac	937	7 739	4 462		2 832		1 221	17 191
6 Baie-Ste-Anne	2 763	20 712	4 802		3 253			31 530
7 Richibucto	1 215	13 258	6 025		3 495			23 993
8 Cap-Pelé	3 455	9 893	2 712		1 000		7 002	24 062
9 Cape Torrentine	1 046	8 425	6 377		4 131		2 353	22 332
Midshore boats								
10 Crab boats	12 957	34 296	165 949	9 146	77 071	6 250		305 669
11 Scottish seiners	12 418	10 869	151 463	8 865	77 836	8 250		269 701
12 Shrimp boats	13 292	20 831	176 856	48 285	23 536	6 000		278 951

(1) If the boat has been transferred to another owner, the new method of financing does not include the previously-granted federal subsidy. This item also includes the federal subsidy for equipment, if applicable (gutting machine).

In order to reimburse the loans granted by the New Brunswick Fisheries Development Board, midshore-boat owners make payments based on a certain percentage of the landed value.

Payments made to the Board during the year also include amounts paid as deposits for equipment purchases or major repairs.

Table 15 indicates the average payments and deposits made during the year for each type of boat. These monies are then credited to either equipment purchases, major repairs, loan interest, marine insurance or if there is a balance, to the debt principal. The applicable interest rates vary from 4% to 11¼% and the average loan interests for the three types of boats take into consideration the reimbursement of 25% of the interest calculated and paid in accordance with Article No. 5 of Regulation 78-31 of the New Brunswick Fisheries Development Board.

According to Table 16, 32,49% of the payments and deposits made by shrimp boat owners was used to pay interest accrued during the year, and 37,74% was credited to the principal.

Table 15 - Distribution of payments made to the N.B. Fisheries Development Board - midshore boats - 1980

Items	Averages for midshore boats		
	Crab boats	Scottish seiners	Shrimp boats
	$	$	$
Payments and deposits	31 438	31 679	35 584
Distributed as follows:			
- equipment purchases	2 087	1 975	2 381
- major repairs	1 216	1 365	1 997
- loan interest	8 903	9 158	11 563
- marine insurance	4 331	3 786	6 216
- payments on principal	14 901	15 395	13 427

Table 16 - Percentage distribution of payments made to the N.B. Fisheries Development Board - midshore boats - 1980

Items	Percentage averages		
	Crab boats	Scottish seiners	Shrimp boats
	%	%	%
Payments and deposits	100,00	100,00	100,00
Distributed as follows:			
- equipment purchases	6,64	6,23	6,69
- major repairs	3,87	4,31	5,61
- loan interest	28,32	28,91	32,49
- marine insurance	13,77	11,95	17,47
- payments on principal	47,40	48,60	37,74

Table 17 presents the rate of return on investment, which is another method of measuring profitability.

Of the nine groups of inshore boats, five recorded deficits and four recorded profits. The boats in the Val Comeau-Neguac group realized the highest return with 14,6% and 17,5% of total investment and net investment respectively.

The crab boats, with an average net profit of 14 952$ per boat, had a 4,9% return on total investment and 6,7% on net investment.

As for the Scottish seiners, the return was 8,1% and 11,9% of total investment and net investment respectively.

The shrimp boats recorded an average net deficit of 2 653$.

Table 17 - Return on capital for boats studied - 1980

Regions and types of boats (Groups 1-12)	Averages				
	Total cost of investment	Net cost of investment (1)	Net profit or loss (2)	Average rate of return on total investment(3)	Average rate of return on net investment (3)
	$	$	$	%	%
Inshore boats					
1 Stonehaven-Maisonnette	20 638	19 874	1 151	5,6	5,8
2 Caraquet	41 051	38 762	- 2 713	Ø	Ø
3 Lamèque-Shippegan	21 032	18 862	- 642	Ø	Ø
4 Lamèque-Shippegan	19 060	18 241	- 6 271	Ø	Ø
5 Val Comeau-Neguac	17 191	14 359	2 506	14,6	17,5
6 Baie-Ste-Anne	31 530	28 277	2 675	8,5	9,5
7 Richibucto	23 993	20 498	1 966	8,2	9,6
8 Cap-Pelé	24 062	23 062	- 1 467	Ø	Ø
9 Cape Tormentine	22 332	18 201	- 1 089	Ø	Ø
Midshore boats					
10 Crab boats	305 669	222 348	14 952	4,9	6,7
11 Scottish seiners	269 701	183 615	21 806	8,1	11,9
12 Shrimp boats	288 800	259 264	- 2 653	Ø	Ø

(1) Total cost of investment less federal subsidy and the value of rented equipment.

(2) Information based on Tables 7a and 7b in the Appendix. The profits or losses indicated take into consideration the average salaries calculated for the captains in each group of inshore boats.

(3) In the calculation of the average rate of return, the life expectancy of the boats in each group was not considered.

Ø Not applicable

5. COMPARISON BETWEEN AVERAGE COST INCURRED AND THE PRICE RECEIVED PER POUND OF FISH

It is impossible to determine the average cost per pound for each species of fish landed, because the boats operating do not concentrate on one species alone. Hence, a total average cost was established for all species involved in each group studied.

Table 18 establishes a comparaison between this total average cost and the average price received. It should be noted that, of the inshore boats, group no. 4 (Lamèque-Shippegan), considered to be the herring-boat group, fished for fifty-one (51) days, that is, for a very short period of time, and, the average landed value was only 8 174$. All the expenses incurred could not therefore be covered by this low return, and here the loss of 13,47¢ per pound is of little significance because of this fact.

Fishermen in the Val Comeau-Neguac region realized the higest profit among the inshore boats, that is, an average net profit of 10,97¢ per pound of fish landed. The crab boats realized an average profit of 2,25¢ per pound, and the Scottish seiners realized a profit of 1,75¢ per pound of fish landed. The shrimp boats, primarly because of the cost of oil, and also partly because of the interest expense incurred on loans, suffered a loss of .42¢ per pound of fish landed.

Table 18 - Comparison between the average cost and the price received per pour of fish - 1980

Regions and types of boats (Groups 1-12)	Cost per pound of fish landed (1)	Price received per pound	Profit or loss per pound
	¢	¢	¢
Inshore boats			
1 Stonehaven-Maisonnette	25,92	28,01	2,09
2 Caraquet	15,33	12,17	- 3,16
3 Lamèque-Shippegan	45,50	43,75	- 1,75
4 Lamèque-Shippegan	31,04	17,57	- 13,47
5 Val Comeau-Neguac	61,30	72,27	10,97
6 Baie-Ste-Anne	26,81	30,13	3,32
7 Richibucto	25,56	27,47	1,91
8 Cap-Pelé	26,99	25,20	- 1,79
9 Cape Tormentine	50,96	47,83	- 3,13
Midshore boats			
10 Crab boats	23,14	25,40	2,25
11 Scottish seiners	12,59	14,34	1,75
12 Shrimp boats	27,89	27,47	- ,42

(1) Depreciation is included in the total costs, as are the average salaries calculated for the captains of inshore boats.

6. AVERAGE PRICE REQUIRED TO BREAK EVEN

Tables 19(a) and 19(b) indicate the sales of fish necessary, the price required per pound, and the quantities needed to break even, that is, to reach the point at which the enterprise does not make any profit or suffer any loss.

According to Table 19(a), 156 187 pounds of fish landings are required for the herring boats in Caraquet (group no. 2). The methods used to pay off the debts on inshore boats are sometimes irregular and often consist of annual fixed payments. Therefore, the landings required to reach the break-even point, and cover payments on the principal, are not included.

According to Table 19(b), Scottish seiners must land 1 204 142 pounds of fish to break even and to cover payment on the principal as well as losses incurred according to the price received.

Table 19a - Average price required to break even - 1980
Inshore boats

Items	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan
1 Net income of boat	1 151	- 2 713	- 642
2 Sale of fish	15 459	16 300	16 107
3 Other receipts		1 510	2
4 Total receipts	15 459	17 810	16 109
5 Receipts required to break even (4-1)	14 308	20 523	16 751
6 Sales of fish required to break even (5-3)	14 308	19 013	16 748
7 Necessary ratio to sales of fish (6÷2)%	92,55	116,64	103,98
8 Price received per pound in ¢	28,01	12,17	43,75
9 Price required to break even (8 x 7)	25,92	14,20	45,49
10 Landings in pounds	55 198	133 905	36 819
11 Landings required to break even according to the price received (10 x 7)	51 086	156 187	38 284

* These amounts are not really applicable because the prices of the various species (lobster, cod, etc.) are too different.

Table 19a - Average price required to break even - 1980
Inshore boats

Items	4 Lamèque-Shippegan	5 Val Comeau - Neguac	6 Baie-Ste-Anne
1 Net income of boat	- 6 271	2 506	2 675
2 Sale of fish	8 174	16 386	21 587
3 Other receipts		18	297
4 Total receipts	8 174	16 404	21 883
5 Receipts required to break even (4-1)	14 445	13 898	19 208
6 Sales of fish required to break even (5-3)	14 445	13 880	18 911
7 Necessary ratio to sales of fish (6÷2)%	176,72	84,71	87,60
8 Price received per pound in ¢	17,57	72,27	30,13
9 Price required to break even (8 x 7)	31,05	61,22	26,39
10 Landings in pounds	46 533	22 673	71 643
*11 Landings required to break even according to the price received (10 x 7)	82 233	19 206	62 759

* These amounts are not really applicable because the prices of the various species (lobster, cod, etc) are too different.

Table 19a - Average price required to break even - 1980
Inshore boats

Items	7 Richibucto	8 Cap-Pelé	9 Cape-Tormentine
1 Net income of boat	1 966	- 1 467	- 1 089
2 Sale of fish	24 958	20 598	16 657
3 Other receipts	231		
4 Total receipts	25 189	20 598	16 657
5 Receipts required to break even (4-1)	23 223	22 065	17 746
6 Sales of fish required to break even (5-3)	22 992	22 065	17 746
7 Necessary ratio to sales of fish (6÷2)%	92,12	107,12	106,54
8 Price received per pound in ¢	27,47	25,20	47,83
9 Price required to break even (8 x 7)	25,31	26,99	50,96
10 Landings in pounds	90 852	81 741	34 822
*11 Landings required to break even according to the price received (10 x 7)	83 693	87 561	37 099

* These amounts are not really applicable because the prices of the various species (lobster, cod, etc) are too different.

Table 19b - Average price required to break even - 1980
Midshore boats

Items	10 Crab boats	Scottish seiners	Shrimp boats
1 Net income of boat	14 952	21 806	- 2 653
2 Sale of fish	167 594	178 618	185 594
3 Other receipts	37	6	196
4 Total receipts	167 631	178 624	185 790
5 Receipts required to break even (4-1)	152 679	156 818	188 443
6 Sales of fish required to break even (5-3)	152 642	156 812	188 247
7 Necessary ratio to sales of fish (6÷2)%	91,08	87,79	101,43
8 Price received per pound in ¢	25,40	14,34	27,47
9 Price required to break even (8 x 7)	23,12	12,59	27,86
10 * Payment on principal	14 901	15 396	13 427
11 Losses	503	440	264
12 Total (10 + 11)	15 404	15 836	13 691
13 Receipts required to break even and cover payment on the principal as well as the losses (5 + 12)	168 083	172 654	202 134
14 Necessary ratio (13 ÷ 5)	110,09	110,10	107,27
15 Price required to break even and cover payment on the principal as well as the losses (9 x 14)	25,46	13,86	29,89
16 Landings in pounds	659780	1 245 463	675 648
17 *Landings required to break even according to the price received (16 x 7)	600 928	1 093 392	718 484
18 *Landings required to break even and cover payment on the principal as well as the losses according to the price received (13 - 3) ÷ 8	661 740	1 204 142	685 310

* Item 10 includes payments on the principal in order to reimburse the debt.

* Items 17 and 18 take into consideration other fishing receipts. These amounts are not really applicable to crab boats and shrimp boats because of the very different prices for the various species (crab, cod, etc.)

7. TRENDS IN THE DISTRIBUTION OF AVERAGE RECEIPTS

In general, the inshore boats had lower returns this year than last year. Of seven groups of boats, three suffered losses. Last year, out of similar groups, only the group of herring boats in Caraquet suffered a loss. A reduction in the landed value of lobster was the principal reason. Twenty-four lobster boats landed a total value of 305 819,26$ in 1979, whereas twenty-five very similar boats landed a total value of 271 874,40$* in 1980; an average of 12 742,47$ per boat in 1979 and 10 874,98$ in 1980. This is a decrease of 1 867,49$ per boat (See Table 20(a) on pages 42 and 43).

The average total receipts of crab boats fell by 16 103$ compared to the previous year; on the other hand, average expenses increased by 13 849$ in 1980. Expenses for the motor, fishing gears, fuel, and interest represent the principal increases (See Table 20(b) on page 44 .

Returns for Scottish seiners are somewhat similar to those of the previous year despite a reduction in the average total

* In 1979, this corresponded to 186 031 pounds (24 boats), and in 1980, to 181 769 pounds of lobster (25 boats).

receipts and an increase in expenses, which has meant an average decrease of 5 519$ in net revenue.

There was a rather disturbing drop in returns for shrimp boats compared to the previous year. The average landed value fell by 32 405$ and fuel expenses increased by 7 210$ compared to the previous year. Thus, fuel represented 16,9% of the total receipts in 1979, and 23,7% in 1980.

Table 20a - Trends in the distribution of average receipts - inshore boats

	Stonehaven - Maisonnette		Caraquet		Lamèque-Shippegan		Val Comeau-Neguac	
	1979	1980	1979	1980	1979	1980	1979	1980
	$	$	$	$	$	$	$	$
Averages of total receipts	17 632	15 459	20 130	17 810	19 705	16 109	17 490	16 404
Distribution:								
- total cash expenditures	5 264	5 201	8 102	7 882	6 656	6 871	6 510	6 005
- net crew share	8 179	8 298	12 657	10 573	9 987	9 087	6 768	7 312
- net boat share	4 189	1 960	- 629	- 645	3 067	151	4 212	3 087
- depreciation	710	809	1 843	2 068	749	793	587	581
- net revenue	3 479	1 151	-2 472	-2 713	2 313	- 642	3 625	2 506

Table 20a - Trends in the distribution of average receipts - inshore boats

	Baie-Ste-Anne		Richibucto		Cape Tormentine	
	1979	1980	1979	1980	1979	1980
	$	$	$	$	$	$
Averages of total receipts	25 716	21 883	25 606	25 189	22 008	16 657
Distribution:						
- total cash expenditures	7 516	8 837	9 351	9 664	7 922	7 904
- net crew share	10 185	9 528	11 043	12 721	12 012	8 972
- net boat share	8 015	3 518	5 212	2 804	2 074	- 219
- depreciation	750	843	779	838	673	870
- net revenue	7 265	2 675	4 433	1 966	1 401	- 1 089

Table 20b - Trends in the distribution of average receipts - midshore boats

	Crab boats		Scottish seiners		Shrimp boats	
	1979	1980	1979	1980	1979	1980
	$	$	$	$	$	$
Averages of total receipts	183 734	167 631	184 963	178 624	217 999	185 790
Distribution:						
- total cash expenditures	46 662	60 511	55 368	60 980	96 920	100 642
- net crew share	85 547	77 863	89 208	83 064	82 201	69 820
- net boat share	51 525	29 257	40 387	34 580	38 878	15 328
- depreciation	9 883	14 305	13 062	12 774	16 145	17 981
- net revenue	41 642	14 952	27 325	21 806	22 733	- 2 653

APPENDIX

Table 1 (a) - Summary of fishing activities and financial outcome in 1980

Items	Averages for inshore boats		
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan
Fishing season	20	14	17
Number of men in crew	1,8	3,3	2,1
Number of trips	95	60	82
Days at sea	95	74	82
Days fished	95	60	82
Hours fished	781	583	628
Landings in pounds	55 198	133 905	36 819
Landed values ($)	15 459	16 300	16 107
Price in cents per pound	28,01	12,17	43,75
Total receipts ($)	15 459	17 810	16 109
Total cash expenditures ($)	5 201	7 882	6 871
New crew earnings ($) (1)	8 298	10 573	9 087
Net cash boat share ($)	1 960	- 645	150
Depreciation ($)	809	2 068	793
Net profit or loss	1 151	- 2 713	- 642
Total number of boats	5	4	4
Number showing a net profit	2	1	2
Number showing a net loss	3	3	2

(1) Includes salaries of helpers as well as average salaries calculated for captains.

Table 1 (a) - Summary of fishing activities and financial outcome in 1980

Items	Averages for inshore boats		
	4 Lamèque-Shippegan	5 Val Comeau-Neguac	6 Baie-Ste-Anne
Fishing season	20	15	17
Number of men in crew	2,2	2,1	2,3
Number of trips	51	81	102
Days at sea	58	81	102
Days fished	51	81	102
Hours fished	305	624	520
Landings in pounds	46 533	22 673	71 643
Landed values ($)	8 174	16 386	21 587
Price in cents per pound	17,57	72,27	30,13
Total receipts ($)	8 174	16 404	21 883
Total cash expenditures ($)	5 751	6 004	8 837
New crew earnings ($) (1)	7 933	7 313	9 528
Net cash boat share ($)	- 5 510	3 087	3 518
Depreciation ($)	761	581	843
Net profit or loss	- 6 271	2 506	2 676
Total number of boats	3	4	4
Number showing a net profit	-	1	3
Number showing a net loss	3	3	1

(1) Includes salaries of helpers as well as average salaries calculated for captains.

Table 1 (a) - Summary of fishing activities and financial outcome in 1980

Items	Averages for inshore boats		
	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
Fishing season	21	21	22
Number of men in crew	2,4	2,0	2,0
Number of trips	90	91	76
Days at sea	90	91	76
Days fished	90	91	76
Hours fished	722	720	851
Landings in pounds	90 852	81 741	34 822
Landed values ($)	24 958	20 598	16 657
Price in cents per pound	27,47	25,20	47,83
Total receipts ($)	25 189	20 598	16 657
Total cash expenditures ($)	9 664	8 848	7 904
New crew earnings ($) (1)	12 721	12 353	8 971
Net cash boat share ($)	2 803	- 603	- 218
Depreciation ($)	838	864	870
Net profit or loss	1 965	- 1 467	- 1 089
Total number of boats	4	3	4
Number showing a net profit	4	1	2
Number showing a net loss	-	2	2

(1) Includes salaries of helpers as well as average salaries calculated for captains.

Table 1 (b) - Summary of fishing activities and financial outcome in 1980

Items	Averages for midshore boats		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
Fishing season	27	31	32
Number of men in crew	4,2	4,7	4,2
Number of trips	41	29	16
Days at sea	116	112	156
Days fished	76	77	112
Hours fished	825	1 056	1 794
Landings in pounds	659 780	1 245 463	675 648
Landed values ($)	167 594	178 618	185 594
Price in cents per pound	25,40	14,34	27,47
Total receipts ($)	167 631	178 624	185 790
Total cash expenditures ($)	60 511	60 980	100 642
New crew earnings ($) (1)	77 863	83 064	69 820
Net cash boat share ($)	29 257	34 580	15 328
Depreciation ($)	14 305	12 774	17 981
Net profit or loss	14 952	21 806	- 2 653
Total number of boats	4	4	4
Number showing a net profit	4	4	2
Number showing a net loss	-	-	2

(1) Includes net cash crew shares as well as commissions

Table 2 (a) - Average landings per species - inshore boats - 1980

Species	Averages by region				
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan	4 Lamèque-Shippegan	5 Val Comeau - Neguac
	lbs	lbs	lbs	lbs	lbs
Lobster	6 860		8 073	1 928	8 194
Herring	23 973	64 506	9 783	20 335	1 839
Mackerel	20 493	55 700	5 954	21 756	7 499
Cod	1 025	1 500	7 883	1 399	2 926
Plaice	210		1 036		113
Hake	398		3 990		
Shad	22				63
Salmon	50		25		1 211
Alewife	2 167		75	1 115	642
Oyster					186
Scallop					
Tuna		708			
Caplin		11 491			
Cancer crab					
Totals	55 198	133 905	36 819	46 533	22 673

Table 2 (a) - Average landings per species - inshore boats - 1980

Species	Averages by region			
	6 Baie-Ste-Anne	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
	lbs	lbs	lbs	lbs
Lobster	9 155	7 198	7 327	4 248
Herring	30 809	26 312	37 821	1 625
Mackerel	20 431	240	35 578	
Cod	486	503	172	1 094
Plaice	8 195			10 195
Hake	2 075	12 541		16 192
Shad	13			
Salmon	356			
Alewife	123	42 281	359	
Oyster				
Scallop		1 519		1 468
Tuna				
Caplin				
Cancer crab		258	484	
Totals	71 643	90 852	81 741	34 822

Table 2 (b) - Average landings per species - midshore boats - 1980

Species	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
	lbs	lbs	lbs
Cod	56 901	952 233	127 084
Haddock		2 370	961
Hake	2 759	11 367	423
Halibut			520
Turbot			16 856
Plaice	17 857	279 464	96 118
Catfish			204
Redfish			119 576
Cusk			322
Shrimp			312 634
Snow crab	581 608		
Unclas-sified	655	29	950
Totals	659 780	1 245 463	675 648

Table 3 (a) - Average landed values per species - inshore boats - 1980

Species	Averages by region				
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan	4 Lamèque-Shippegan	5 Val Comeau - Neguac
	$	$	$	$	$
Lobster	9 487		11 893	2 925	11 833
Herring	3 426	9 353	1 416	2 674	221
Mackerel	2 062	5 570	707	2 330	757
Cod	178	270	1 503	195	462
Plaice	29		125		14
Hake	44		408		
Shad	4				6
Salmon	109		50		2 943
Alewife	120		5	50	34
Oyster					116
Scallop					
Tuna		885			
Caplin		222			
Cancer crab					
Totals	15 459	16 300	16 107	8 174	16 386

Table 3 (a) - Average landed values per species - inshore boats - 1980

Species	Averages by region			
	6 Baie-Ste-Anne	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
	$	$	$	$
Lobster	14 090	10 337	11 224	7 958
Herring	3 157	4 559	5 050	163
Mackerel	1 966	30	4 189	
Cod	88	116	37	155
Plaice	1 106			1 205
Hake	332	2 383		1 887
Shad	3			
Salmon	838			
Alewife	7	2 748	25	
Oyster				
Scallop		4 759		5 289
Tuna				
Caplin				
Cancer crab		26	73	
Totals	21 587	24 958	20,598	16 657

Table 3 (b) - Average landed values per species - midshore boats - 1980

Species	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
	$	$	$
Cod	7 049	131 905	17 537
Haddock		537	197
Hake	296	1 106	42
Halibut			744
Turbot			1 695
Plaice	2 422	45 070	12 964
Catfish			21
Redfish			15 556
Cusk			35
Shrimp			136 784
Snow crab	157 821		
Unclas-sified	6	Ø	19
Totals	167 594	178 618	185 594

Table 4 (a) - Average prices received per species - inshore boats - 1980
(in cents per pound)

Species	Averages by region				
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan	4 Lamèque-Shippegan	5 Val Comeau - Neguac
Lobster	138,29		147,32	151,71	144,41
Herring	14,29	14,50	14,47	13,15	12,02
Mackerel	10,06	10,00	11,87	10,71	10,09
Cod	17,37	18,00	19,07	13,94	15,79
Plaice	13,81		12,07		12,39
Hake	11,01		10,23		
Shad	18,18				9,52
Salmon	218,00		200,0		243,02
Alewife	5,54		6,67	4,48	5,30
Oyster					62,37
Scallop					
Tuna		125,00			
Caplin		1,93			
Cancer crab					
All species	28,01	12,17	43,75	17,57	72,27

Table 4 (a) - Average prices received per species - inshore boats - 1980 (in cents per pound)

Species	Averages by region			
	6 Baie-Ste-Anne	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
Lobster	153,90	143,61	153,19	187,34
Herring	10,25	17,33	13,35	10,03
Mackerel	9,62	12,50	11,77	
Cod	18,11	23,06	21,51	14,17
Plaice	13,50			11,82
Hake	16,00	19,00		11,65
Shad	23,07			
Salmon	235,39			
Alewife	5,69	6,50	6,96	
Oyster				
Scallop		313,30		360,29
Tuna				
Caplin				
Cancer crab		10,08	15,08	
All species	30,13	27,47	25,20	47,83

Table 4 (b) - Average prices received per species - midshore boats - 1980
(in cents per pound)

Species	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
Cod	12,39	13,85	13,80
Haddock		22,66	20,50
Hake	10,73	9,73	9,93
Halibut			143,08
Turbot			10,06
Plaice	13,56	16,13	13,49
Catfish			10,29
Redfish			13,01
Cusk			10,87
Shrimp			43,75
Snow crab	27,14		
Unclassified	,92	,51	2,00
All species	25,40	14,34	27,47

Table 5 (a) - Percentage distribution of total landings per species- inshore boats - 1980

Species	Averages by region				
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan	4 Lamèque-Shippegan	5 Val Comeau - Neguac
	%	%	%	%	%
Lobster	12,4		21,9	4,1	36,1
Herring	43,4	48,2	26,6	43,7	8,1
Mackerel	37,2	41,6	16,2	46,8	33,1
Cod	1,9	1,1	21,4	3,0	12,9
Plaice	0,4		2,8		0,5
Hake	0,7		10,8		
Shad	Ø				0,3
Salmon	0,1		0,1		5,4
Alewife	3,9		0,2	2,4	2,8
Oyster					0,8
Scallop					
Tuna		0,5			
Caplin		8,6			
Cancer crab					
Totals	100,0	100,0	100,0	100,0	100,0

Ø Less than one half of 0,1

Table 5 (a) - Percentage distribution of total landings per species - inshore boats - 1980

Species	Averages by region			
	6 Baie-Ste-Anne	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
	%	%	%	%
Lobster	12,8	7,9	9,0	12,2
Herring	43,0	29,0	46,3	4,7
Mackerel	28,5	0,3	43,5	
Cod	0,7	0,5	0,2	3,1
Plaice	11,4	13,8		29,3
Hake	2,9			46,5
Shad	Ø			
Salmon	0,5			
Alewife	0,2	46,5	0,4	
Oyster				
Scallop		1,7		4,2
Tuna				
Caplin				
Cancer crab		0,3	0,6	
Totals	100,0	100,0	100,0	100,0

Ø Less than one half of 0,1

Table 5 (b) - Percentage distribution of total landings per species - midshore boats - 1980

Species	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
	%	%	%
Cod	8,6	76,5	18,8
Haddock		0,2	0,1
Hake	0,4	0,9	0,1
Halibut			0,1
Turbot			2,5
Plaice	2,7	22,4	14,2
Catfish			∅
Redfish			17,7
Cusk			0,1
Shrimp			46,3
Snow crab	88,2		
Unclassified	0,1	∅	0,1
Totals	100,0	100,0	100,0

∅ Less than one half of 0,1

Table 6 (a) - Percentage distribution of total landed value per species - inshore boats - 1980

Species	Averages by region				
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan	4 Lamèque-Shippegan	5 Val Comeau - Neguac
	%	%	%	%	%
Lobster	61,4		73,8	35,8	72,2
Herring	22,2	57,4	8,8	32,7	1,4
Mackerel	13,3	34,2	4,4	28,5	4,6
Cod	1,1	1,6	9,3	2,4	2,8
Plaice	0,2		0,8		0,1
Hake	0,3		2,6		
Shad	Ø				Ø
Salmon	0,7		0,3		18,0
Alewife	0,8		Ø	0,6	0,2
Oyster					0,7
Scallop		5,4			
Tuna		1,4			
Caplin					
Cancer crab					
Totals	100,0	100,0	100,0	100,0	100,0

Ø Less than one half of 0,1

Table 6 (a) - Percentage distribution of total landed value per species - inshore boats - 1980

Species	Averages by region			
	6 Baie-Ste-Anne	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
	%	%	%	%
Lobster	65,3	41,4	54,5	47,8
Herring	14,6	18,3	24,5	1,0
Mackerel	9,1	0,1	20,3	
Cod	0,4	0,5	0,2	0,9
Plaice	5,1			7,2
Hake	1,6	9,5		11,3
Shad	Ø			
Salmon	3,9			
Alewife	Ø	11,0	0,1	
Oyster				
Scallop		19,1		31,8
Tuna				
Caplin				
Cancer crab		0,1	0,4	
Totals	100,0	100,0	100,0	100,0

Ø Less than one half of 0,1

Table 6 (b) - Percentage distribution of total landed value per species - midshore boats - 1980

Species	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
	%	%	%
Cod	4,2	73,9	9,5
Haddock		0,3	0,1
Hake	0,2	0,6	Ø
Halibut			0,4
Turbot			0,9
Plaice	1,4	25,2	7,0
Catfish			Ø
Redfish			8,4
Cusk			Ø
Shrimp			73,7
Snow crab	94,2		
Unclassified	Ø	Ø	Ø
Totals	100,0	100,0	100,0

Ø Less than one half of 0,1

Table 7 (a) - Average receipts, expenses and net returns for inshore boats - 1980

Items	Averages		
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan
Size (feet)	33	49	35
	$	$	$
Receipts			
Sale of fish	15 459	16 300	16 107
Other receipts		1 510	2
Total receipts	15 459	17 810	16 109
Expenses			
Maintenance and repairs			
Hull	312	427	256
Engine	141	525	478
Winch	64	108	104
Fishing gear	574	781	852
Electronic equipment	31	34	48
Subtotal	1 122	1 875	1 738
Other operating expenses			
Fuel	1 137	1 403	1 036
Bait	935	100	1 154
Ice		55	
Provisions	364	790	471
Salaries	69	34	12
Wharfage	64	120	85
Miscellaneous	1 460	1 892	1 696
Subtotal	4 029	4 394	4 454
Fixed charges			
Marine Insurance	8	356	141
Workmen's Compensation			
Rentals		1 071	486
Interest	42	186	52
Other	50	1 613	679
Subtotal			
Total cash expenses	5 201	7 882	6 871
Net cash returns to labour and capital	10 258	9 928	9 238
(1) Net crew earnings			
Net crew share (1)	8 298	10 573	9 087
Commissions			
Subtotal	8 298	10 573	9 087
(2) Net boat share	1 960	- 645	151
Less depreciation	809	2 068	793
Net income of boat	1 151	- 2 713	- 642

(1) Includes salaries of helpers as well as average salaries calculated for captains

(2) Depreciation calculated at 7½% annually.

Table 7 (a) - Average receipts, expenses and net returns for inshore boats - 1980

Items	Averages		
	4 Lamèque-Shippegan	5 Val Comeau-Neguac	6 Baie-Ste-Anne
Size (feet)	44	43	41
	$	$	$
Receipts			
Sale of fish	8 174	16 386	21 587
Other receipts		18	296
Total receipts	8 174	16 404	21 883
Expenses			
Maintenance and repairs			
Hull	460	281	582
Engine	200	355	529
Winch	223	42	121
Fishing gear	1 221	657	1 101
Electronic equipment	15	20	62
Subtotal	2 119	1 355	2 395
Other operating expenses			
Fuel	1 131	1 211	1 462
Bait	299	804	1 255
Ice			
Provisions	494	788	943
Salaries	5	38	37
Wharfage	108	89	168
Miscellaneous	1 331	1 351	2 116
Subtotal	3 368	4 281	5 981
Fixed charges			
Marine Insurance	60	114	174
Workmen's Compensation			
Rentals			
Interest	176	189	209
Other	28	66	78
Subtotal	264	369	461
Total cash expenses	5 751	6 005	8 837
Net cash returns to labour and capital	2 423	10 399	13 046
(1) Net crew earnings			
Net crew share (1)	7 933	7 312	9 528
Commissions			
Subtotal	7 933	7 312	9 528
(2) Net boat share	- 5 510	3 087	3 518
Less depreciation	761	581	843
Net income of boat	- 6 271	2 506	2 675

(1) Includes salaries of helpers as well as average salaries calculated for captains

(2) Depreciation calculated at 7½% annually.

Table 7 (a) - Average receipts, expenses and net returns for inshore boats - 1980

Items	Averages		
	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
Size (feet)	44	41	44
	$	$	$
Receipts			
Sale of fish	24 958	20 598	16 657
Other receipts	231		
Total receipts	25 189	20 598	16 657
Expenses			
Maintenance and repairs			
Hull	982	401	410
Engine	617	414	499
Winch	219	78	178
Fishing gear	1 315	1 187	867
Electronic equipment	28	18	23
Subtotal	3 161	2 098	1 977
Other operating expenses			
Fuel	2 139	2 065	1 868
Bait	913	1 156	947
Ice		6	1
Provisions	931	605	615
Salaries	40	13	34
Wharfage	105	116	98
Miscellaneous	1 934	1 845	1 603
Subtotal	6 062	5 806	5 166
Fixed charges			
Marine Insurance	159	108	185
Workmen's Compensation			
Rentals			
Interest	194	756	511
Other	88	80	65
Subtotal	441	944	761
Total cash expenses	9 664	8 848	7 904
Net cash returns to labour and capital	15 525	11 750	8 753
(1) Net crew earnings			
Net crew share (1)	12 721	12 353	8 972
Commissions			
Subtotal	12 721	12 353	8 972
(2) Net boat share	2 804	- 603	- 219
Less depreciation	838	864	870
Net income of boat	1 966	- 1 467	- 1 089

(1) Includes salaries of helpers as well as average salaries calculated for captains

(2) Depreciation calculated at 7½% annually.

Table 7 (b) - Average receipts, expenses and net returns for midshore boats - 1980

Items	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
Size (feet)	65	64	85
	$	$	$
Receipts			
Sale of fish	167 594	178 618	185 594
Other receipts	37	6	196
Total receipts	167 631	178 624	185 790
Expenses			
Maintenance and repairs			
Hull	2 636	6 833	4 024
Engine	7 509	2 917	7 054
Winch	1 330	1 831	4 493
Fishing gear	5 929	11 231	3 641
Electronic equipment	997	1 554	1 658
Subtotal	18 401	24 366	20 870
Other operating expenses			
Fuel	11 780	11 486	44 065
Bait	7 311		
Ice	1 825	2 288	6 615
Provisions	2 916	3 468	4 786
Salaries	306	432	853
Wharfage	59	70	163
Miscellaneous	3 112	3 534	3 318
Subtotal	27 309	21 278	59 800
Fixed charges			
Marine Insurance	4 331	3 786	6 216
Workmen's Compensation	441	409	449
Rentals	532	1 410	1 206
Interest	8 903	9 158	11 589
Other	594	573	512
Subtotal	14 801	15 336	19 972
Total cash expenses	60 511	60 980	100 642
Net cash returns to labour and capital	107 120	117 644	85 148
(1) Net crew earnings			
Net crew share (1)	74 747	83 064	60 784
Commissions	3 116		9 036
Subtotal	77 863	83 064	69 820
(2) Net boat share	29 257	34 580	15 328
Less depreciation	14 305	12 774	17 981
Net income of boat	14 952	21 806	- 2 653

(2) Depreciation calculated at 7½% annually.

Table 8 (a) - Percentage distribution of average total receipts for inshore boats - 1980

Items	Averages		
	1 Stonehaven-Maisonnette	2 Caraquet	3 Lamèque-Shippegan
Size (feet)	33	49	35
	%	%	%
Receipts			
Sale of fish	100,0	91,5	100,0
Other receipts		8,5	
Total receipts	100,0	100,0	100,0
Expenses			
Maintenance and repairs			
Hull	2,0	2,4	1,6
Engine	0,9	3,0	3,0
Winch	0,4	0,6	0,6
Fishing gear	3,7	4,3	5,3
Electronic equipment	0,2	0,2	0,3
Subtotal	7,2	10,5	10,8
Other operating expenses			
Fuel	7,4	7,9	6,4
Bait	6,1	0,6	7,2
Ice		0,3	
Provisions	2,4	4,4	2,9
Salaries	0,4	0,2	0,1
Wharfage	0,4	0,7	0,5
Miscellaneous	9,4	10,6	10,5
Subtotal	26,1	24,7	27,6
Fixed charges			
Marine Insurance	0,1	2,0	0,9
Workmen's Compensation			
Rentals			
Interest		6,0	3,0
Other	0,2	1,1	0,3
Subtotal	0,3	9,1	4,2
Total cash expenses	33,6	44,3	42,6
Net cash returns to labour and capital	66,4	55,7	57,4
(1) Net crew earnings	53,7	59,3	56,5
Net crew share (1)			
Commissions			
Subtotal	53,7	59,3	56,5
(2) Net boat share	12,7	- 3,6	0,9
Less depreciation	5,2	11,6	4,9
Net income of boat	7,5	- 15,2	- 4,0

Table 8 (a) - Percentage distribution of average total receipts for inshore boats - 1980

Items	Averages		
	4 Lamèque-Shippegan	5 Val Comeau-Neguac	6 Baie-Ste-Anne
Size (feet)	44	43	41
	%	%	%
Receipts			
Sale of fish	100,0	99,9	98,6
Other receipts		,1	1,4
Total receipts	100,0	100,0	100,0
Expenses			
Maintenance and repairs			
Hull	5,6	1,7	2,7
Engine	2,5	2,2	2,4
Winch	2,7	0,3	0,6
Fishing gear	14,9	4,0	5,0
Electronic equipment	0,2	0,1	0,3
Subtotal	25,9	8,3	11,0
Other operating expenses			
Fuel	13,8	7,4	6,7
Bait	3,7	4,9	5,7
Ice			
Provisions	6,0	4,8	4,3
Salaries	0,1	0,2	0,2
Wharfage	1,3	0,5	0,7
Miscellaneous	16,3	8,2	9,7
Subtotal	41,2	26,0	27,3
Fixed charges			
Marine Insurance	0,7	0,7	0,8
Workmen's Compensation			
Rentals			0,4
Interest	2,2	1,2	0,9
Other	0,3	0,4	
Subtotal	3,2	2,3	2,1
Total cash expenses	70,3	36,6	40,4
Net cash returns to labour and capital	29,7	63,4	59,6
(1) Net crew earnings			
Net crew share (1)	97,1	44,6	43,5
Commissions			
Subtotal	97,1	44,6	43,5
(2) Net boat share	- 67,4	18,8	16,1
Less depreciation	9,3	3,5	3,8
Net income of boat	- 76,7	15,3	12,3

Table 8 (a) - Percentage distribution of average total receipts for inshore boats - 1980

Items	Averages		
	7 Richibucto	8 Cap-Pelé	9 Cape Tormentine
Size (feet)	44	41	44
	%	%	%
Receipts			
Sale of fish	99,1	100,0	100,0
Other receipts	0,9		
Total receipts	100,0	100,0	100,0
Expenses			
Maintenance and repairs			
Hull	3,9	1,9	2,5
Engine	2,5	2,0	3,0
Winch	0,9	0,4	1,1
Fishing gear	5,2	5,8	5,2
Electronic equipment	0,1	0,1	0,1
Subtotal	12,6	10,2	11,9
Other operating expenses			
Fuel	8,5	10,0	11,2
Bait	3,6	5,6	5,7
Ice		Ø	Ø
Provisions	3,7	2,9	3,7
Salaries	0,2	0,1	0,2
Wharfage	0,4	0,6	0,6
Miscellaneous	7,7	9,0	9,6
Subtotal	24,1	28,2	31,0
Fixed charges			
Marine Insurance	0,6	0,5	1,1
Workmen's Compensation			
Rentals			
Interest	0,8	3,7	3,1
Other	0,3	0,4	0,4
Subtotal	1,7	4,6	4,6
Total cash expenses	38,4	43,0	47,5
Net cash returns to labour and capital	61,6	57,0	52,5
(1) Net crew earnings			
Net crew share (1)	50,5	60,0	53,8
Commissions			
Subtotal	50,5	60,0	53,8
(2) Net boat share	11,1	- 3,0	- 1,3
Less depreciation	3,3	4,2	5,2
Net income of boat	7,8	- 7,2	- 6,5

Ø Not applicable

Table 8 (b) - Percentage distribution of average total receipts for midshore boats - 1980

Items	Averages		
	10 Crab boats	11 Scottish seiners	12 Shrimp boats
Size (feet)	65	64	85
	%	%	%
Receipts			
Sale of fish	100,0	100,0	99,9
Other receipts			,1
Total receipts	100,0	100,0	100,0
Expenses			
Maintenance and repairs			
Hull	1,6	3,9	2,1
Engine	4,5	1,6	3,8
Winch	0,8	1,0	2,4
Fishing gear	3,5	6,3	2,0
Electronic equipment	0,6	0,9	0,9
Subtotal	11,0	13,7	11,2
Other operating expenses			
Fuel	7,0	6,4	23,7
Bait	4,4		
Ice	1,1	1,3	3,6
Provisions	1,7	2,0	2,6
Salaries	0,2	0,2	0,4
Wharfage	Ø	Ø	0,1
Miscellaneous	1,9	2,0	1,8
Subtotal	16,3	11,9	32,2
Fixed charges			
Marine Insurance	2,6	2,1	3,4
Workmen's Compensation	0,3	0,2	0,2
Rentals	0,3	0,8	0,7
Interest	5,3	5,2	6,2
Other	0,3	0,3	0,3
Subtotal	8,8	8,6	10,8
Total cash expenses	36,1	34,2	54,2
Net cash returns to labour and capital	63,9	65,8	45,8
(1) Net crew earnings			
Net crew share (1)	44,6	46,5	32,7
Commissions	1,9		4,8
Subtotal	46,5	46,5	37,5
(2) Net boat share	17,4	19,3	8,3
Less depreciation	8,5	7,1	9,7
Net income of boat	8,9	12,2	- 1,4

Ø Not applicable